

SHINWA COOLING TOWER

CROSS FLOW SQUARE TYPE

U SERIES

SNC-U MODEL

- Energy saving
- Space saving
- Compact design
- High efficiency and performance



SNC-U MODEL (CROSS FLOW SQUARE TYPE)



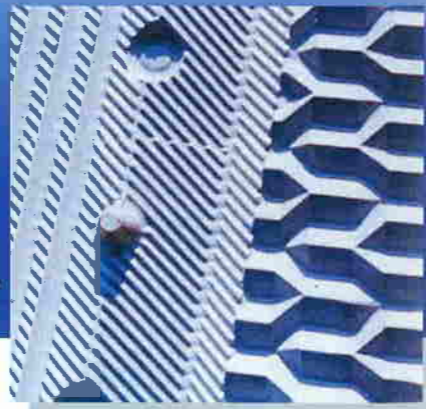
Motor set



Upper water basin



Louver blade



Fill



Lower water basin

Feature

1 Energy Saving, Space Saving Compactness and Lightweight

“SNC-U” model is designed to install in a small space. Compare with other model, SNC model is the best one for space limited installation. New development such as high efficiency fill type eliminator combined and cone shaped fan casing are incorporated. Combination of super low noise fan type AVS reduction in installation space and volume as well as dry & wet weight by 20% in average compared with our old models.



2 Built - in Piping Arrangements

“U” series cooling towers are supplied with built-in piping arrangements as standard. The result is cost and space saving in the installation work.



3 Easier Maintenance

A new speed reducer SRS with wedge belt is compact and easy for maintenance. Also FRP lower basin is sloped for easy cleaning. (Photo shown is at the time of belt cover removed.)



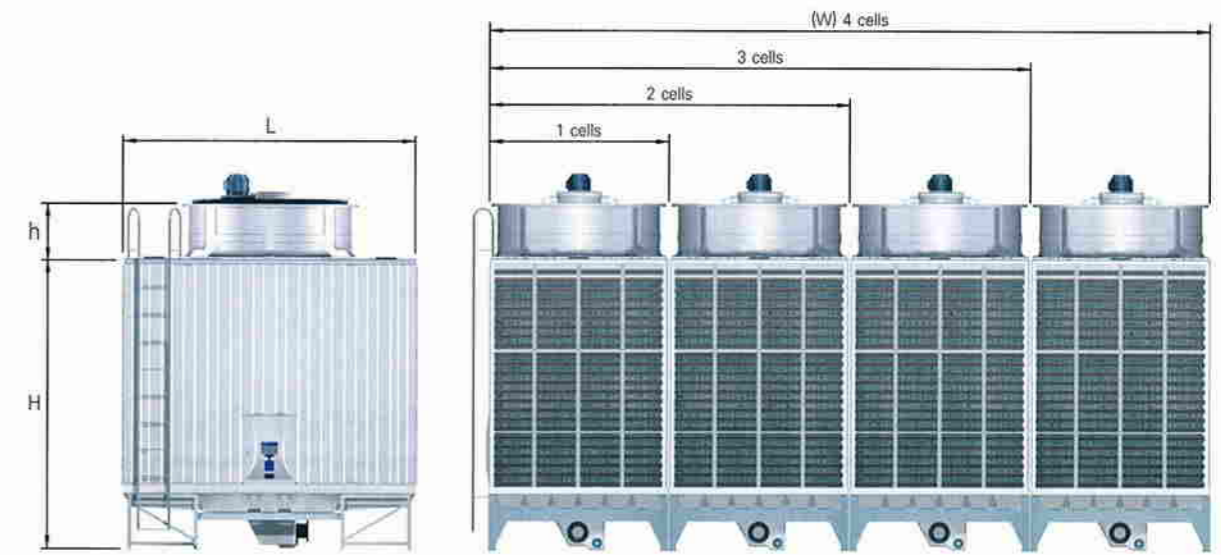
4 Reduced Installation Time

Delivery can be made in semi assembled unit form at site on request. The installation time at site can be greatly reduced by this method.



SNC-U Series (Space saving)

For chiller other applications



● Selection - Standard Specifications - Noise Level

※ Other voltages such as 380, 415V are available on request

| Specification | | Dimensions (mm) | | | | | | Piping Size (A) | | | | | | | Weight (kg) | | Motor for fan | | | | | | | Noise Level dB (A) | | | | | |
|----------------------|--------------------|-----------------|------------------|------|------|----------------|------|-----------------|-----|-----|----|------|----|------|-------------|-----------|---------------------|----------|----|------|------|---------|------|--------------------|-----------------------|------|------|-----------------------------|------|
| | | | | | | | | | | | | | | | Shipping | Operation | 3PH x 400V x 50Hz ※ | | | | | | | Fan 45° Dm | Louver Side H=1.5m | | | Casing Panel Side H=1.5m | |
| Inlet Temp.(°C) | 37.8 | 35 | Outlet Temp.(°C) | 32.2 | 29.5 | W.B. Temp.(°C) | 28.3 | 27 | In | Out | Ov | Dr | Ba | Ma | | | Q`ty | Dia mm ø | kW | P | Drv | Amp (A) | Q`ty | | 2 m | 10 m | 16 m | 2 m | 10 m |
| Model No. | Water flow (L/min) | L | W | H | h | In | Out | Ov | Dr | Ba | Ma | Q`ty | | | | | | | | | | | | | | | | | |
| EXTERNAL PIPING TYPE | SNC-U280ASSY | 2834 | 1988 | 3570 | 2150 | 3790 | 645 | - | 150 | 50 | 50 | 32 | 32 | 1 | 1280 | 3380 | 1800 | 7.5 | 4 | BD | 16.3 | 1 | 70 | 65 | 57.5 | 53 | 61 | 54 | 50.5 |
| | 320ASSY | 3244 | 2275 | 3870 | 2350 | 3790 | 715 | - | 150 | 50 | 50 | 32 | 32 | 1 | 1400 | 3750 | 2100 | 7.5 | 4 | BD | 16.3 | 1 | 71.5 | 66.5 | 59 | 65.5 | 62.5 | 55.5 | 52 |
| | 350ASSY | 3622 | 2540 | 3870 | 2350 | 3790 | 715 | - | 150 | 50 | 50 | 32 | 32 | 1 | 1440 | 3790 | 2100 | 11.0 | 4 | BD | 21.3 | 1 | 72.5 | 67.5 | 60 | 66.5 | 63.5 | 66.5 | 63 |
| | 560ASSY | 5668 | 3976 | 3570 | 4300 | 3790 | 645 | - | 150 | 50 | 50 | 32 | 32 | 2 | 2450 | 6650 | 1800 | 7.5 | 4 | BD | 16.3 | 2 | 72 | 67 | 59.5 | 56 | 63 | 56 | 52.5 |
| | 640ASSY | 6488 | 4550 | 3870 | 4700 | 3790 | 715 | - | 150 | 50 | 50 | 32 | 32 | 2 | 2690 | 7390 | 2100 | 7.5 | 4 | BD | 16.3 | 2 | 74 | 69 | 61.5 | 58 | 65 | 58 | 54.5 |
| | 700ASSY | 7244 | 5080 | 3870 | 4700 | 3790 | 715 | - | 150 | 50 | 50 | 32 | 32 | 2 | 2770 | 7470 | 2100 | 11.0 | 4 | BD | 21.3 | 2 | 75 | 70 | 62.5 | 59 | 66 | 59 | 55.5 |
| | 840ASSY | 8502 | 5964 | 3570 | 6450 | 3790 | 645 | - | 150 | 50 | 50 | 32 | 32 | 3 | 3620 | 9920 | 1800 | 7.5 | 4 | BD | 16.3 | 3 | 73 | 68 | 60.5 | 57 | 64 | 57 | 53.5 |
| | 960ASSY | 9732 | 6825 | 3870 | 7050 | 3790 | 715 | - | 150 | 50 | 50 | 32 | 32 | 3 | 3980 | 11030 | 2100 | 7.5 | 4 | BD | 16.3 | 3 | 74.5 | 70 | 62.5 | 59 | 66 | 59 | 55.5 |
| | 1050ASSY | 10866 | 7620 | 3870 | 7050 | 3790 | 715 | - | 150 | 50 | 50 | 32 | 32 | 3 | 4100 | 11150 | 2100 | 11.0 | 4 | BD | 21.3 | 3 | 75.5 | 71 | 63.5 | 60 | 67 | 60 | 56.5 |
| | 1120ASSY | 11336 | 7952 | 3570 | 8600 | 3790 | 645 | - | 150 | 50 | 50 | 32 | 32 | 4 | 4790 | 13190 | 1800 | 7.5 | 4 | BD | 16.3 | 4 | 73.5 | 69.5 | 62 | 58.5 | 65.5 | 58.5 | 55 |
| | 1280ASSY | 12976 | 9100 | 3870 | 9400 | 3790 | 715 | - | 150 | 50 | 50 | 32 | 32 | 4 | 5270 | 14670 | 2100 | 7.5 | 4 | BD | 16.3 | 4 | 75 | 71 | 63.5 | 60 | 67 | 60 | 56.5 |
| 1400ASSY | 14488 | 10160 | 3870 | 9400 | 3790 | 715 | - | 150 | 50 | 50 | 32 | 32 | 4 | 5430 | 14830 | 2100 | 11.0 | 4 | BD | 21.3 | 4 | 76 | 72 | 64.5 | 61 | 68 | 61 | 57.5 | |
| INTERNAL PIPING TYPE | SNC-U280ASSD | 2834 | 1988 | 3570 | 2150 | 3790 | 645 | 150 | 150 | 50 | 50 | 32 | 32 | 1 | 1330 | 3430 | 1800 | 7.5 | 4 | BD | 16.3 | 1 | 70 | 65 | 57.5 | 53 | 61 | 54 | 50.5 |
| | 320ASSD | 3244 | 2275 | 3870 | 2350 | 3790 | 715 | 150 | 150 | 50 | 50 | 32 | 32 | 1 | 1450 | 3800 | 2100 | 7.5 | 4 | BD | 16.3 | 1 | 71.5 | 66.5 | 59 | 65.5 | 62.5 | 55.5 | 52 |
| | 350ASSD | 3622 | 2540 | 3870 | 2350 | 3790 | 715 | 150 | 150 | 50 | 50 | 32 | 32 | 1 | 1480 | 3830 | 2100 | 11.0 | 4 | BD | 21.3 | 1 | 72.5 | 67.5 | 60 | 66.5 | 63.5 | 66.5 | 63 |
| | 560ASSD | 5668 | 3976 | 3570 | 4300 | 3790 | 645 | 150 | 150 | 50 | 50 | 32 | 32 | 2 | 2540 | 6740 | 1800 | 7.5 | 4 | BD | 16.3 | 2 | 72 | 67 | 59.5 | 56 | 63 | 56 | 52.5 |
| | 640ASSD | 6488 | 4550 | 3870 | 4700 | 3790 | 715 | 150 | 150 | 50 | 50 | 32 | 32 | 2 | 2780 | 7480 | 2100 | 7.5 | 4 | BD | 16.3 | 2 | 74 | 69 | 61.5 | 58 | 65 | 58 | 54.5 |
| | 700ASSD | 7244 | 5080 | 3870 | 4700 | 3790 | 715 | 150 | 150 | 50 | 50 | 32 | 32 | 2 | 2850 | 7550 | 2100 | 11.0 | 4 | BD | 21.3 | 2 | 75 | 70 | 62.5 | 59 | 66 | 59 | 55.5 |
| | 840ASSD | 8502 | 5964 | 3570 | 6450 | 3790 | 645 | 150 | 150 | 50 | 50 | 32 | 32 | 3 | 3750 | 10050 | 1800 | 7.5 | 4 | BD | 16.3 | 3 | 73 | 68 | 60.5 | 57 | 64 | 57 | 53.5 |
| | 960ASSD | 9732 | 6825 | 3870 | 7050 | 3790 | 715 | 150 | 150 | 50 | 50 | 32 | 32 | 3 | 4110 | 11160 | 2100 | 7.5 | 4 | BD | 16.3 | 3 | 74.5 | 70 | 62.5 | 59 | 66 | 59 | 55.5 |
| | 1050ASSD | 10866 | 7620 | 3870 | 7050 | 3790 | 715 | 150 | 150 | 50 | 50 | 32 | 32 | 3 | 4220 | 11270 | 2100 | 11.0 | 4 | BD | 21.3 | 3 | 75.5 | 71 | 63.5 | 60 | 67 | 60 | 56.5 |
| | 1120ASSD | 11336 | 7952 | 3570 | 8600 | 3790 | 645 | 150 | 150 | 50 | 50 | 32 | 32 | 4 | 4960 | 13360 | 1800 | 7.5 | 4 | BD | 16.3 | 4 | 73.5 | 69.5 | 62 | 58.5 | 65.5 | 58.5 | 55 |
| | 1280ASSD | 12976 | 9100 | 3870 | 9400 | 3790 | 715 | 150 | 150 | 50 | 50 | 32 | 32 | 4 | 5440 | 14840 | 2100 | 7.5 | 4 | BD | 16.3 | 4 | 75 | 71 | 63.5 | 60 | 67 | 60 | 56.5 |
| 1400ASSD | 14488 | 10160 | 3870 | 9400 | 3790 | 715 | 150 | 150 | 50 | 50 | 32 | 32 | 4 | 5590 | 14990 | 2100 | 11.0 | 4 | BD | 21.3 | 4 | 76 | 72 | 64.5 | 61 | 68 | 61 | 57.5 | |

L=Length , W=Width , H=Height , h=Fan Casing Height

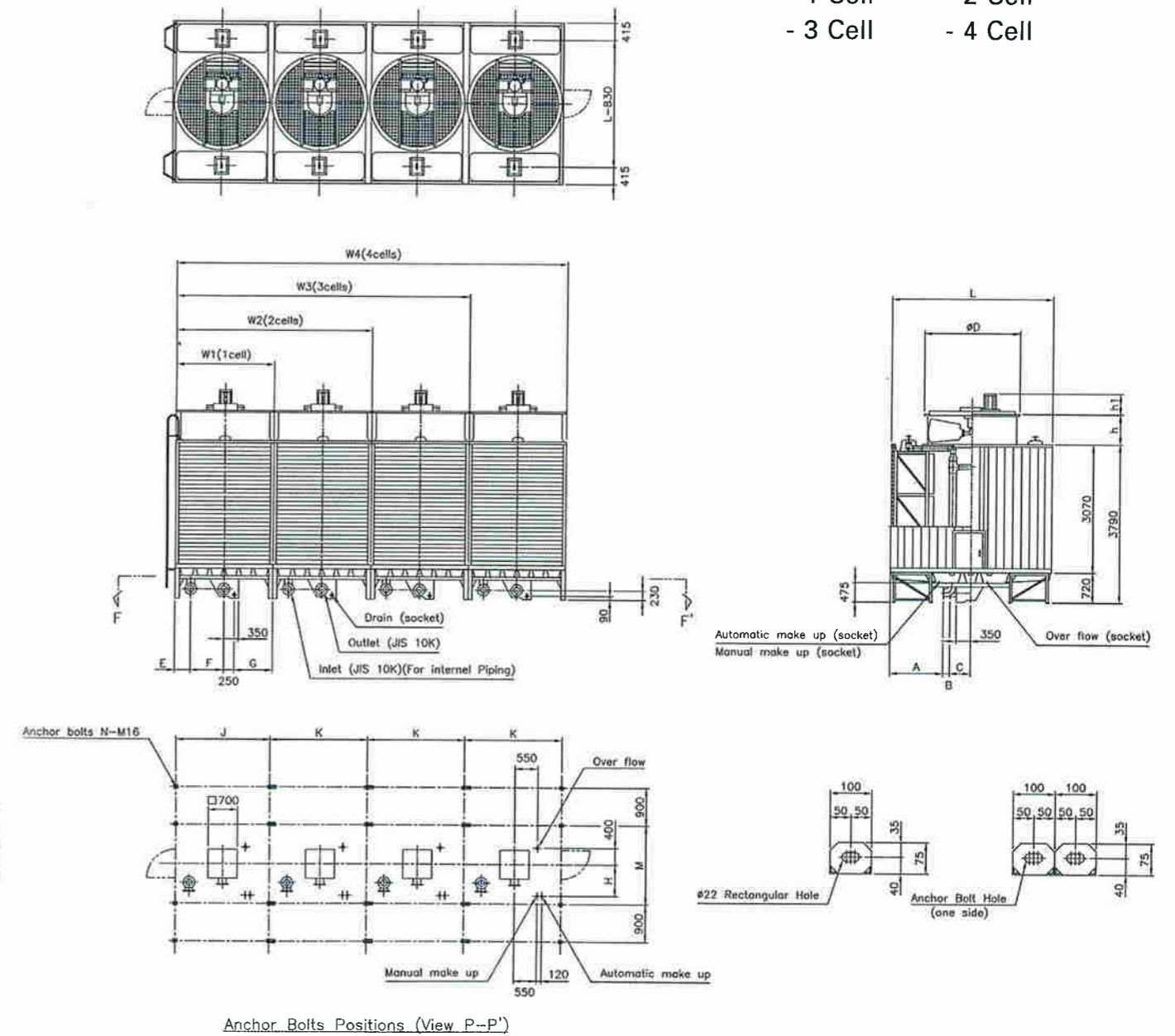
In=Water inlet, Out=Water outlet, Ov=Over flow, Dr=Drain, Ba=Automatic make-up, Ma=Manual make-up, Drv=Driving method, BD=Belt drive, Amp=Rated current, Dm=Fan diameter point

● Schematic Drawings - Piping & Anchor Bolts Positions

| Specification Model | Cell (s) | Dimensions (mm) | | | | | | | Pipe Positions (mm) | | | | | | | | Bolts Position (mm) | | | Bolt Q'ty N |
|------------------------|-------------|-----------------|-------|------|------|------|------|-----|---------------------|------|-----|-----|-----|-----|-----|-----|---------------------|------|------|----------------|
| | | L | Width | | | | ∅D | h | h1 | A | B | C | E | F | G | H | J | K | M | |
| | | | W1 | W2 | W3 | W4 | | | | | | | | | | | | | | |
| SNC-U 280 ASSY ASSD | 1 | 3570 | 2150 | - | - | - | 2000 | 645 | 420 | 1125 | 160 | 500 | 375 | 700 | 825 | 600 | 2050 | - | 1600 | 8 |
| 320 ASSY ASSD | | 3870 | 2350 | - | - | - | 2300 | 715 | 440 | 1275 | 160 | 500 | 375 | 800 | 925 | 750 | 2250 | - | 1900 | 8 |
| 350 ASSY ASSD | | 3870 | 2350 | - | - | - | 2300 | 715 | 531 | 1275 | 160 | 500 | 375 | 800 | 925 | 750 | 2250 | - | 1900 | 8 |
| 560 ASSY ASSD | 2 | 3570 | 2150 | 4300 | - | - | 2000 | 645 | 420 | 1125 | 160 | 500 | 375 | 700 | 825 | 600 | 2050 | 2150 | 1600 | 12 |
| 640 ASSY ASSD | | 3870 | 2350 | 4700 | - | - | 2300 | 715 | 440 | 1275 | 160 | 500 | 375 | 800 | 925 | 750 | 2250 | 2350 | 1900 | 12 |
| 700 ASSY ASSD | | 3870 | 2350 | 4700 | - | - | 2300 | 715 | 531 | 1275 | 160 | 500 | 375 | 800 | 925 | 750 | 2250 | 2350 | 1900 | 12 |
| 840 ASSY ASSD | 3 | 3570 | 2150 | 4300 | 6450 | - | 2000 | 645 | 420 | 1125 | 160 | 500 | 375 | 700 | 825 | 600 | 2050 | 2150 | 1600 | 16 |
| 960 ASSY ASSD | | 3870 | 2350 | 4700 | 7050 | - | 2300 | 715 | 440 | 1275 | 160 | 500 | 375 | 800 | 925 | 750 | 2250 | 2350 | 1900 | 16 |
| 1050 ASSY ASSD | | 3870 | 2350 | 4700 | 7050 | - | 2300 | 715 | 531 | 1275 | 160 | 500 | 375 | 800 | 925 | 750 | 2250 | 2350 | 1900 | 16 |
| 1120 ASSY ASSD | 4 | 3570 | 2150 | 4300 | 6450 | 8600 | 2000 | 645 | 420 | 1125 | 160 | 500 | 375 | 700 | 825 | 600 | 2050 | 2150 | 1600 | 20 |
| 1280 ASSY ASSD | | 3870 | 2350 | 4700 | 7050 | 9400 | 2300 | 715 | 440 | 1275 | 160 | 500 | 375 | 800 | 925 | 750 | 2250 | 2350 | 1900 | 20 |
| 1400 ASSY ASSD | | 3870 | 2350 | 4700 | 7050 | 9400 | 2300 | 715 | 531 | 1275 | 160 | 500 | 375 | 800 | 925 | 750 | 2250 | 2350 | 1900 | 20 |

SNC-U280~1400ASSY/ASSD

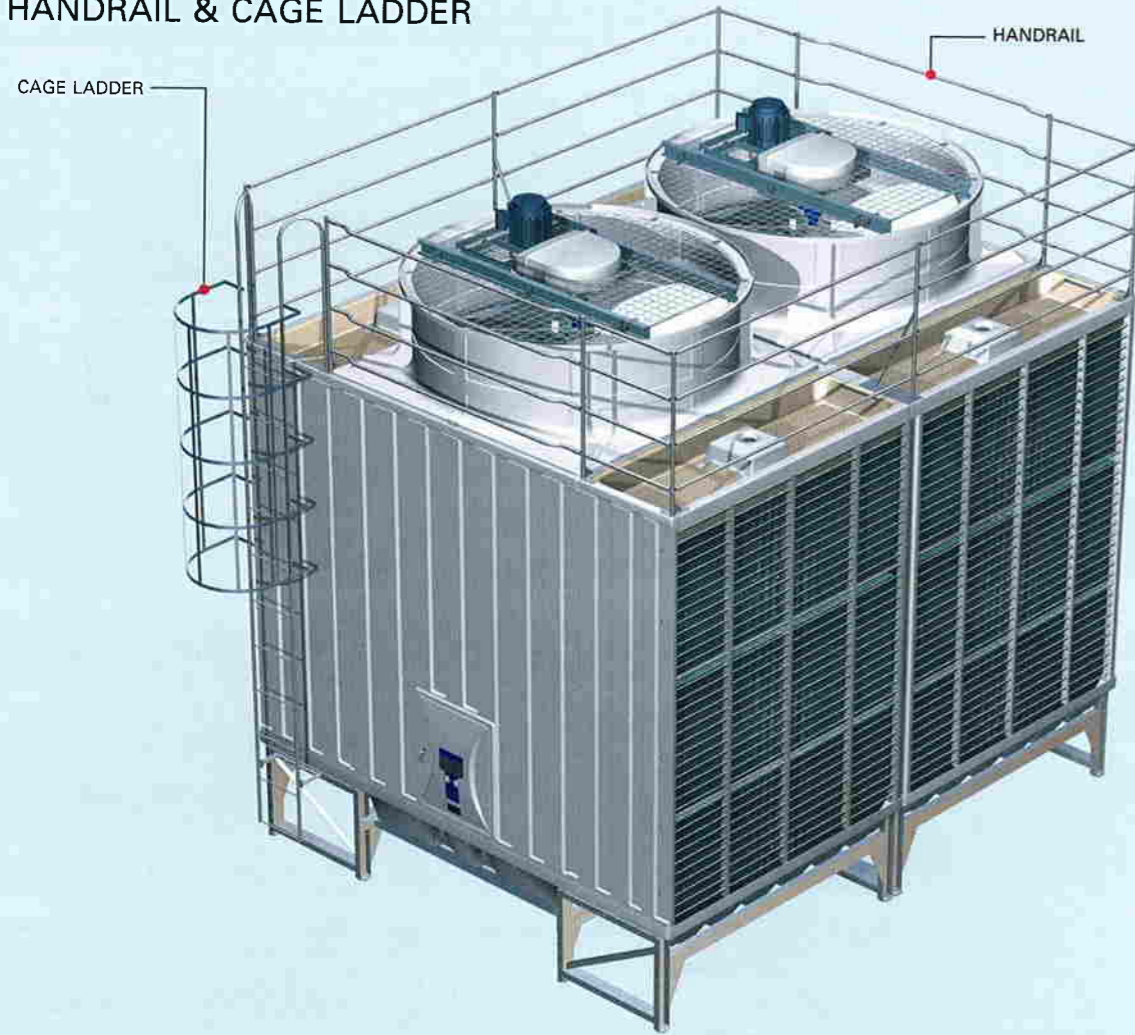
- 1 Cell
- 2 Cell
- 3 Cell
- 4 Cell



The above drawing shown is internal piping type (ASSD)

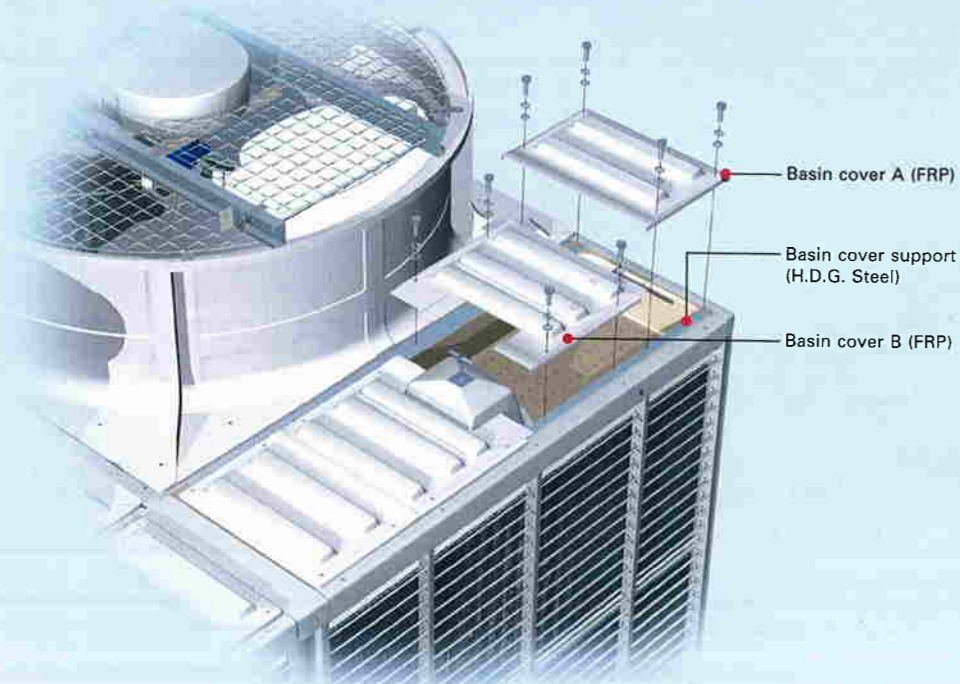
U - Series optional parts

HANDRAIL & CAGE LADDER



UPPER WATER BASIN COVER (F.R.P. or H.D.G. Steel)

- Protect from invasion of dust into the upper basin
- interrupt sunlight which is causing algae glowth



OTHER OPTION PARTS

1. F.R.P. Duct (Straight , Elbow)
2. Partition
3. Additional eliminator (P.V.C.)

EBARA SHINWA gives answers to any of your request with our variety of selection



Cross flow type (SLC)



Closed circuit type (MXC)



Counter flow type (SCC)



Counter flow type (SBC)



Cross flow type (SNC-R)

